Press Release IMGENEX India Pvt. Ltd, Bhubaneswar.



India on Tuesday launched a low-cost, indigenously-manufactured Thalassemia and Sickle Cell diagnostic kit that will simplify the identification of 7 common beta-thalassemia mutations and two common abnormal haemoglobin, common in India. This kit is tailor made for Indian population can also be used for screening.

To be available at approximately Rs. 400 in the public health facilities up to district levels, the kit is expected to bring down the prices of such test in the open market where it costs up to Rs. 15,000. Even government institution like AIIMS provides this test at Rs. 4,000 at a highly subsidized price. As of now, India uses imported products for these tests.

This new kit has given Odisha to find a place in the map of diagnostic industry. It is now being domestically manufactured by **IMGENEX** India Pvt. Ltd., Bhubaneswar, a leading biotech firm in Odisha. Reverse Dot Blot Hybridization (RDB) Kit for Thalassemia, launched by the Union Health and Family Welfare Minister Ghulam Nabi Azad, has been developed by scientists of National Institute of Immunohaematolgoy (NIIH) and the Indian Council for Medical research (ICMR) The role of the molecular kit is to meet the need for affordable and sensitive tests for diagnosis of affected children and for prenatal diagnosis in the first trimester itself.

There are around 200 mutations described worldwide causing the beta-thalasemmia. However, each country has a small sub-set of 6-7 common mutations and a larger number of rarer ones. In India, 65 mutations have been characterized so far of which 7 common beta-thalassemia mutations are accounting for around 90 per cent of the molecular defects.

Thalassemia major children require blood transfusion every month from early childhood along with adequate iron. This costs around Rs. 1.5 lakh per year for management of each child. Sickle cell anemia also causes considerable morbidity with repeated painful events which include pain in bones, joints, chest and other parts of the body. It can also cause complications like stroke and sudden death.

"The only way to avoid the birth of affected children with these inherited haemoglobin disorders is by increasing awareness in the population, screening for identification of carriers, genetic counseling and pre-natal diagnosis for prevention programmes," V. M. Katoch, Director General, ICMR said. Where the fetus has been detected for Thalassemia, termination can be an option, he explained since these disorders have no cure.